

SYSTEM AND METHOD FOR ADAPTIVE CLUTTER FILTERING IN ULTRASOUND COLOR FLOW IMAGING

Abstract of the Invention

A system and method for adaptive clutter filtering in ultrasound color flow imaging is provided including an iterative algorithm that is used to select the best clutter filter for each packet of color flow data. If significant clutter motion is present, a high pass filter cutoff frequency is automatically set to suppress the clutter and associated flash artifacts. The cutoff frequency is chosen according to the frequency of the clutter – the lower the clutter frequency, the lower the cutoff frequency can be. If clutter frequencies are low, lower filter cutoffs allow for maximum low flow detection. In this manner, the filter cutoff frequency can be optimized based on the data for each pixel in the color flow image.